DOCUMENT RESUME

ED 462 333 SO 033 555

AUTHOR Harbin, Janice
TITLE People Who Supply Our Food. Grade 2 Model Lesson for Standard 4. California History-Social Science Course Models.
INSTITUTION California State Dept. of Education, Sacramento.
PUB DATE 2001-00-00
NOTE 51p.; For additional related lessons, see SO 033 549-565.
AVAILABLE FROM California Department of Education, 721 Capitol Mall, 6th Floor, Sacramento, CA 95814. Tel: 916-654-6299; Fax: 916-657-4964. For full text: http://www.history.ctaponline.org/center/.
PUB TYPE Guides - Classroom - Teacher (052)
EDRS PRICE EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Academic Standards; *Agricultural Production; Curriculum Based Assessment; *Economics; Farmers; *Food; Grade 2; Primary Education; *Social Studies; *State Standards; Teacher Developed Materials
IDENTIFIERS *California; Food Consumption

ABSTRACT

Grade 2 students learn about the people who supply food for the nation. Students study about different foods and the many individuals, from the farmer to the consumer, who are involved in bringing the products to market. The unit, which should take 8 weeks to implement, is designed to help students develop an appreciation and respect for these people and the work they do. The unit examines types of farms, how crops get to market, and the interdependence of food producers, processors, and distributors. It compares food production from long ago to production today. Students begin to understand this country's transition from a self-sufficient nation to a nation of consumers who are dependent on others to meet their needs. The lesson plan discusses the significance of the topic; lists focus questions; features literacy links; covers materials needed for the lesson; and provides information and student activities, dividing the topic into "Beginning the Topic"; "Developing the Topic"; and "Culminating the Topic." It suggests assessment activities and offers extended/correlated activities. (Contains a resource list for the sample topic. Appended are additional informative materials and sample worksheets.) (BT)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 462 333

CALIFORNIA History-Social Science

Course Models

People Who Supply Our Food

Grade 2 Model Lesson for Standard 4

Developed by Janice Harbin

SO 033 555

2001

http://www.history.ctaponline.org/center/

California Department of Education
721 Capitol Mall, 6th Floor
Sacramento, CA 95814
(916) 654-6299

California Department of Education

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY HAS BEEN GRANTED BY

C. Robinson

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

Standard 4: People Who Supply Our Food

Students understand basic economic concepts and their individual roles in the economy, and demonstrate basic economic reasoning skills, in terms of:

1. food production and consumption long ago and today including the role of farmers, processors, distributors, weather, and land and water resources
2. the role and interdependence of buyers (consumers) and sellers (producers) of goods and services
3. how limits on resources require people to choose what to produce and what to consume

Sample Topic for Standard 4:

The food chain from the producer (farmer), to the processors and distributors, to you, the consumer; food production, now and long ago

Suggested Time:

8 weeks

Developed by Janice Harbin, Little Lake City School District, in conjunction with Dr. Priscilla Porter under the auspices of the Center for History-Social Science Education at California State University, Dominguez Hills

Significance of the Topic

In first grade students learned about the use of money to purchase goods and services and about the specialized work that people do to manufacture, transport, and market goods and services. In this unit, students learn about the people who supply our food. These people are a vital link in providing the goods that are necessary for daily life. Students study about different foods and the many people from the farmer to the consumer who are involved in bringing the products to market. The unit is designed to help students develop an appreciation and respect for these people and the work they do. The lesson examines various types of farms, how crops get to market, and the interdependence of food producers, processors, and distributors.

Questions that should regularly be asked of students during this unit are "Why do producers produce the products that they do? What are the benefits? What are the costs? How do they decide what to produce? What skills do the producers need? What are the human, natural, and capital resources used by producers? How have technology and inventions influenced the agriculture industry? What role does transportation play in getting the products to market?" By studying the sequence of events for one food crop as it gets to our table, it is hoped that students will be able to relate that understanding to other products.

Food production from long ago is compared to production today. Students begin to understand the transition of this country from largely a self-sufficient nation to a nation of consumers who are predominately dependent on others to meet their needs. This nation has changed over time from local communities of self-sufficient families to consumers dependent on many other people to supply daily food. Although people have always had to strive to meet their daily needs either directly or indirectly, we are much more interdependent today than our ancestors were. Choices we make regarding resources, production, and distribution more dramatically effect our lives today than in the distant past. The transition of the family unit as farmers to consumers has significantly influenced our way of life and illustrates our interdependence. Studying a food crop and how it is made available for consumers gives students an introductory look at the role California plays today as a leading agricultural state.

Some farm workers still do manual labor even though technology and inventions have strongly influenced the changes in farming and the food industry. The size and sophistication of many farms have increased and the distance of delivering crops to the marketplace has expanded dramatically. Students begin to see both continuity and change in studying about farms and farming over time.

This unit has many links to the content strands of the *History Social-Science Framework*. To develop historical literacy, students compare food production now and long ago. As students compare and contrast the past and the present, they develop an economic

understanding of how scarcity and choice effect the producing of goods for the market. Additional economic concepts that are addressed include interdependency, the use of natural and human resources, producers and consumers, the production of goods and services, and different types of exchange systems.

Active questioning strategies are used as stories are read and students draw conclusions about cause and effect relationships. Geographic awareness is developed as students engage in map studies, identify climate and weather conditions, determine soil conditions, and create geographic features for their farm murals. The lesson also explores the impact of California's geography, natural resources, climate, seasons, and water supply.

Through team work on various projects, students become researchers and learn to use tools such as telephone directories to gather information. Critical thinking skills and problem solving skills are developed as students prepare for the Food Festival Day at the end of the lesson.

Focus Questions:

1. What is your favorite food?
2. Where does our food come from?
3. How is food produced, processed into a variety of food products, distributed, and sold to the consumers?
4. How did people get their food long ago?

Note: The reader may wish to refer to the Assessment Section on pages 20-21

Literacy Links

A variety of activities are included in the lesson that support and develop reading, writing, listening, and speaking standards. Examples of some of these literacy activities are:

Reading

- develop, use, and explain graphic organizers
- develop and explain flow charts
- engage in research using a variety of print and non print material
- reading and listening to literature, poetry, and songs, independently, with partners, and as shared reading using strategies good readers use
- develop and use new content-specific vocabulary
- comprehend fiction and non fiction books and texts
- draw conclusions and determine sequence from information
- identify key words and concepts within sentences
- compare and contrast information
- retell stories and information through storytelling, reader's theater, role play, and visual and performing arts
- make ABC Books

Writing

- label pictures, flow charts, and diagrams
- develop written reports
- take notes and record information based on research
- follow written directions
- write captions
- design and write ads, posters, and labels
- write sentences using sentence frames
- ask and write questions that call for inquiry, interpretation, and evaluation
- rewrite sentences into questions
- write letters, riddles, job descriptions
- rewrite songs, poems, stories

Speaking and Listening

- communicate on the telephone
- formulate questions and conduct interviews
- present written report
- follow oral directions
- memorize songs, poems
- observe strategies modeled by the teacher, such as, the think aloud process and shared writing

Suggested Preparations For The Unit:

- Contact and obtain resources from the *Teacher Resource Guide* from California Foundation for Agriculture in the Classroom and such places as the farm bureau, local and state farms, food processing plants, food distributors, supermarkets, city hall, museums, historical societies, Department of Agriculture (Appendix 10).
- Send the parent letter home. (Appendix 1)
- Check out trade books, pictures, tapes, and videos from the school library, and public library. (See "Recommended Materials List")
- Arrange for classroom speakers, such as, family member of students who are connected with the agriculture and food industry; district and school cafeteria workers; workers from supermarkets, warehouses, food processing plants, farms, restaurants, health food stores, bakeries; home economics; nurse and doctor.
- Arrange for classroom demonstrations about such things as preserving food, cooking food, tasting food, cooking utensils from long ago and now, gardening tools from long and now.
- Arrange for field trips to such places as supermarket, warehouse, restaurant, farm, museum, historical site, food-processing plant, transportation center.
- Create a "Word Wall" for the unit. Include a list of key words, definitions, sentences using the words in context, and pictures. Everything can be written directly on the

World Wall or on post-it notes, sentence strips, or 3x5 cards. Begin the Word Wall with the word "food." Add key words to the Word Wall throughout the lesson. Review the words periodically, as a whole group, small group, and individual student activities. A suggested list of vocabulary words is provided (Appendix 2). Also, use the words as reference if you make a class book or individual ABC Books about the "food chain."

Word Wall Example:

Word	Definition	Sentence	Picture

Recommended Materials to assemble for this unit:

- Trade books about farming and agriculture (Refer to pages 25-27)
- Local map, California map, globe, supermarket map/directory
- Local telephone directory and yellow pages
- Print and non-print research and reference material, such as magazines, newspapers, brochures, encyclopedias, pictures
- Art prints, catalogs, brochures, or calendars with pictures that depict farming, food, transportation, and food production long ago
- Empty food containers and wrappers with labels
- Classroom museum materials, such as, memorabilia, artifacts, and food preserving equipment (such as canning realia)
- Stamps, paper, and envelopes for letter writing
- Cookbooks
- Markers, crayons, scissors, glue, rulers, string or yearn, pipe cleaners, empty milk cartons
- Food products that can be used for art projects, such as, grains, pasta, cereal

Special Notes:

- Review the Economic Background Information for Teachers (Appendix 11.)
- Read, share, and/or book talk as many topic-related books as possible throughout the unit. Some books are recommended, but there are many more to be considered as listed in the Resource section at the end of this unit.
- Include songs, finger plays, rhymes, and poems about food, workers, and topic related concepts as often as possible throughout the lesson. It is not indicated when to use them. Suggested times would be the beginning or end of an activity. Read *Bread and Jam for Frances* by Russel Hoban the first or second day of the lesson. The book includes delightful songs that Frances sings and would help set the tone for including

this type of activity. *Where The Sidewalk Ends,* (Shel Silverstein) has many topic related poems.

- As students create workers for all their projects throughout the lesson, help them learn job titles and job descriptions.

A
Beginning the Topic

Focus Question: What is your favorite food?

Begin the lesson by telling students about your favorite food. Explain why you like it, special memories about it, favorite recipe(s) with it as an ingredient. Include other things that will interest students, such as, photos of you with your favorite food or a favorite book about your favorite food.

Direct students to write about their favorite food in their journal – why they like it, when they eat it, do they have a special memory about it?

Use the following graphic organizer to record each student's favorite food. If the student responds with a food that has more than one ingredient, help the student identify the key ingredient. Chart the responses on the graphic organizer. (Additional information will be added to this organizer later.)

Example:

Student's Name	Favorite Food	Key Ingredient
Sally	apple	
Ken	ice cream	milk
Julia	peanut butter	peanuts

Ask each student: "How do you usually get your favorite food?" Add the following heading to the graphic organizer and chart the responses.

Example:

How I get my favorite food…

Sally	I get it out of the refrigerator
Ken	I go to the ice cream store.
Julia	My mother gives it to me.

People Who

The Food Chain

Introduce the word "depend". Explain that the class will now do an activity that will illustrate how we depend upon other people to get our food. Write the following sentence frame on the board or chart paper:

Food Chain Story

I depend on _____to get _____.

_____depends on_____

to get _____.

Model an example with a student who is willing to provide the words to fill in the frame. Keep repeating the second sentence until the student can no longer think of the next person in the "food chain."

Example:

I depend on my on my Mother to get me strawberries. My Mother depends on the supermarket clerk to get the strawberries. The supermarket clerk depends on the supermarket produce man to get the strawberries. The supermarket produce man depends on the farmer to get the strawberries.

Direct students to complete this sentence for their favorite food. This activity is a good indication of prior knowledge of the "food distribution chain."

Have students think of whom they wrote about in their sentence frame. Present the following graphic organizer. Ask: "Who are the people we depend on to provide our food?" Chart the responses.

Example:

People We Depend On to Provide Our Food

People We Know	People We Don't Know
Mother	farmer
Grandmother	store clerk

What is the location of the Places We Depend On to Provide Our Food?
Display a local map showing streets. Review the features of the map (title, symbol key, local streets, etc.) Ask: "What are some places we depend on to provide our food?" Brainstorm a list of places such as the supermarket, fast food stores, etc. Where are these places located on the map?" Put a dot on the map, with student assistance, to show locations. You may need to check the addresses in a phone book.

Using the Yellow-Pages to Locate Places
Provide as many copies of the local telephone book with yellow pages as possible. Ask: "How do telephone books help us get information?" Show students how to use the yellow pages. Ask: "Can the telephone book help us find the location of people and places we depend on to provide our food? Model some examples.

Example:

Teacher asks: "What topic have we been talking about?
Student answers": "Food!"
Teacher says: "Food is a key word. Look it up in the yellow pages."
(Help students as needed.)

Discuss the various headings related to food. Locate some of the examples on the map and place a dot on the location. Next to the map make a list of the locations. Tie a string or yarn from the name to the location. Explain to the students that they were being researchers when they used the telephone book to find information. What information did the phone book provide?
Explain that researchers often take notes so that they will remember important information and where they got the information. Begin a class chart, "Researcher's Notes" form (Appendix 3). Complete the form together as a class activity to insure that students know how to use the form.

Example:

RESEARCHER'S NOTES

Directions:
Look, study, and observe.
Write and draw what you observed.
Write questions you have about what you observed.

Name what you are observing: telephone book - Yellow Pages

Notes:
Phone books have key words like dictionaries.
The phone book helped us learn where the supermarket is located.
You can learn about places you never knew before in a phone book.
Phone books have phone numbers, addresses, and names.

Discuss the importance of knowing how to find information. Ask students if they can give reasons and examples for needing to know how to get information. Indicate that the class used the telephone book to help get information to learn more about the people we depend on for food. Ask students to identify other things that help give information and chart responses:

Things That Help Give Information:
telephone books
encyclopedias
library
internet
people

Continue to add to this chart periodically as you use different reference materials. This will build an understanding of using many resources to gather information, especially when doing research.

Food and Where it Comes From

Explain to students that in this unit we will learn about where food comes from and how food gets to our table. Since most of the students probably indicated that food comes from farms, explain that we will start by learning about farms.

Make a class KWL chart on what students already know about farms and what they want to learn about farms. Chart responses on the KWL chart (Appendix 4). (Fill in the L section of chart showing what students learned during the culminating activities of the unit.)

B
Developing the Topic

Focus Question: Where does our food come from?

Introduce and read *Farming* by Gail Gibbons. Discuss the topics in the book, such as, the seasons, different farm activities, the role of a farmer, the types of chores, the types of buildings, equipment found on a farm, and the types of animals.

Ask students "Why do you think farmers produce the crops they do?" "How do you think they decide what to produce?" "What skills do you think a farmer needs to have?" "What resources does a farmer need?" "What are the benefits of being a farmer?" "What are the costs?"

Share with students the list of California's Top 20 Farm Products (Appendix 5a). If desired, have students brainstorm what they think the Top 20 farm products might be before you show them the list.

Explain to the students that most farms are specialized. They produce one or two main crops or kinds of farm animals. Review the six different types of farms described at the end of *Farming* - dairy farms; egg and poultry farms; grain farms, fruit farms, vegetables farms, and, cattle farms and ranches. Explain that the class will learn more about the six types of farms.

Form six teams (cooperative learning groups). Distribute the word cards for the Kinds of Farming (Appendix 5b) to each group. Have students cut the list apart and use each farm type as a label for the following sorting activity. (Note the category for "Other.")

Distribute a copy of the word cards for California's Top 20 Farm Products (Appendix 5c) to each group. Have students cut the word cards apart. Sort the crops into the different types of farms.

Dairy Farms	Egg and Poultry Farms	Cattle Farms/Ranches
Milk and cream	Chickens	Cattle and Calves
	Eggs, chicken	
Fruit Farms	**Vegetable Farms**	**Grain Farms**
Grapes	Lettuce	Hay
Almonds	Tomatoes	Cotton lint
Strawberries	Broccoli	Rice
Oranges	Carrots	
Walnuts	Garlic	
Lemons		

Other
Nursery products
Flowers and Foliage

Have each team identify which one of the six farms they want to specialize in as a team project.

Ask: "What are the things that need to be done to produce crops or raise animals?" (Note: A detailed list of farming topics is provided in Appendix 6 as teacher background information. The list should be helpful as you guide students in formulating a list of questions.)

Discuss with students the many things a farmer needs to know and do to grow plants and raise animals. Have the students formulate questions they would like to research about their type of farm. Record the questions on a chart named "Key Questions About Farming." Underline the key words in each question. This chart will help give the teams guidance as they do research. As each question is charted ask the students if that question relates to their type of farm.

Explain that after they have done research on their type of farm, each team will make a mural showing things that are needed on their farm to do the necessary work to produce a crop or raise animals. Each mural should include the following:

- background/geographic features
- different types of buildings
- types of farm equipment
- farmer and farm workers
- crops and/or animals

NOTE: DO NOT BEGIN THE MURALS UNTIL STUDENTS HAVE COMPLETED THE RESEARCH DESCRIBED BELOW.

Team Research (Note: The research and mural construction activity will take approximately two weeks.) Have each team meet to determine one crop or animal that represents their farm. The teacher needs to give input to guide the decisions based on the resources available. (The bibliography provides a list of suggested books to use.)

The animal farm selections will be quite easy. For example:

- dairy farms – cows (milk and cream)
- egg and poultry farms – eggs and chickens
- cattle farms and ranches - cattle and calves (sheep or pigs)

The crop farms offer more variety:

- grain farms – hay, rice, cotton, wheat
- fruit farms – oranges, lemons, strawberries, almonds, walnuts, grapes
- vegetable farms – lettuce, tomato, broccoli, carrots

Writing Letters or Making Telephone Calls to Find Information

Explain that there are many farms in California that could provide us with information. Indicate that it would be helpful to visit and talk directly to farmers who have the same types of farms that we are studying, but that this is not possible. Since we can not go to the different farms, each team will write for information about their products. (Which resources the students contact depend on the results of the teacher's preparation activities before the lesson began. Be prepared with phone numbers and/or addresses. Use local farms as much as possible.)

Direct each team to draft a letter or prepare for a telephone conversation. Encourage students to get ideas from the chart developed earlier, "Key Topics about Farming and the Key Questions." Review letter writing skills and telephone manners. Develop model letter through shared writing. Role play making a telephone call. Make the telephone calls and/or mail the letters as soon as possible.

Resource Center

Set up a Resource Center in the classroom made up of a wide variety of print and non-print materials. Refer to the materials list on page 5 for suggestions. Each team will need several

opportunities to have access to the resources for their research. Plan directions for use of the Resource Center. Suggestions include:

1. Use only one item at a time.
2. Take notes about what you are learning and include the source.
3. Follow team and classroom rules.

Team Murals:
Once the research is completed, begin work on the team murals. Large sheets of butcher paper work best, but use whatever paper and art medium is available. Students should use tempura paint for the background of their mural. To provide a textured look, you might want to use fruit and vegetable prints (Appendix 14) or sponges. It is recommended that the buildings, farm equipment, animals, and farm workers be made separately as large cut-outs. After arranging them on the mural, glue the items in place on the mural background. The teacher will need to guide each group as they make their mural. Completed murals can be shared at the Food Festival Day during the culmination of the unit.

Focus Question: How is food produced, processed into a variety of food products, distributed, and sold to consumers.

Have students bring food containers to class and set up a display. Choose one as an example and ask about the change that occurred in processing. For example, for a container of strawberry jam ask: "What do you think happened to the strawberries to turn them into jam?" Discuss other examples.

From the Farmer to the Market – a Flow Chart
Explain that each team will trace the sequence of a crop or animal from the farm through a food processing plant/factory to the market. However, before the teams choose their food product to trace, we will take several products and work together to determine the steps necessary to process, distribute, and market the product.

Describe and/or read one or more books that illustrate the role of farmers, food processors, and distributors. You may wish to purchase two copies of the book you select so that you can cut it apart and have students practice sequencing the steps on the flow chart. As an alternative, color transparencies or copies of the pages can be effective instructional tools. The following example is based on the book *Make Me a Peanut Butter Sandwich* by Ken Robbins, but any similar book or resource may be used.

Ask students to help identify what they think are the five to six key things that happen to peanuts from the farm to the market. This is an informal discussion. From the book *Make Me a Peanut Butter Sandwich*, read the portion about peanuts. Make a class flow chart about peanuts with at least five to six steps showing the sequence. After the whole class activity, have students work with a partner to complete the peanut flow chart worksheet (Appendix 7A).

For additional review and to help students continue to build their understanding of what happens to food from the farm to the market, share the pictures and/or read portions of a book such as

Bananas by George Ancona. After the review, have each student complete the banana flow chart worksheet independently (Appendix 7B).

They story of *The Little Red Hen* is also a good example of processing food and developing a flow chart. Students could read the story independently since they probably already know it and make their own flow chart.

Other recommended books for the flow chart include: *Bread is for Eating* by David and Phillis Gershator, *The Milk Makers* by Gail Gibbons, *From Wheat to Pasta* by Robert Egan, *What's for Lunch? – Corn* by Pam Robson, and *From Plant to Blue Jeans* by Arthur John L'Hommedieu. (Refer to the Resources section for reference citations.)

Team Flow Charts

Assist each team in choosing a food product. Again, have the students call or write to the appropriate food company. Most major food companies have an 800 telephone number. By using a variety of resources, have each team create a flow chart that depicts their chosen food product from the farm to the market. Encourage students to be creative and inventive.

A wide variety of materials need to be made available, especially different reference books and encyclopedias. Provide each team with large chart paper and/or plain shelf paper. Require the students to include the workers in their flow chart and at least five to six stages. A time line such as the one that was part of the banana flow chart could also be part of the flow chart project. Suggested flow chart stages are as follows:

Crops/Plants	Animals
1. Planting	1. Baby animals
2. Growing and care of	2. Growing and care of
3. Harvesting	3. Full grown
4. Processing the crop to become food product	4. Processing the animal to become food product
5. Packaging the food product	5. Packaging the food product
6. Transporting to market	6. Transporting to market
7. At the market	7. At the market

Tour Guides

After the flow charts are made, have each team prepare a script for a tour of the food processing plant/factory. Discuss with the students what usually happens on a tour. Review tours taken by students. Chart key concepts that the students suggest for the tour guide presentation.
Have each team design and make tour guide hats depicting their food processing plant/factory. Encourage the students to do research to help them design an appropriate hat. Hats can be made out of a band of construction paper with a front piece that represents their company and food. Paper plates can also be used as a base for the hat.

Example:

Key Concepts for the Tour

1. Give history of the food and the factory.
2. Give history of the owner.
3. Explain the types of jobs the workers have and their titles.
4. Explain what happens to the food as it changes into a food product.
5. Name the food products that can be made from the food crop.
6. Name the ingredients of the various food products and where they come from.
7. Identify the transportation modes that are used to get the products to and from the processing plant.
8. Explain how much is eaten of this food product around the world.

In jig saw groups, have each student, while wearing the tour guide hat, take a small group of students on a "tour" of their food processing plant/factory using the flow chart and any other appropriate material that is either student produced or obtained as a resource. Keep rotating the groups until everyone has had a tour of all the plants/factories. Determine ahead of time if food samples will be provided or if any type of written information will be passed out, such as an interesting "Did You Know" fact sheet. Use actual resources from food processing plants as examples of the type of information often provided visitors. This presentation can be given to other classrooms or parents, as well as, on the Food Festival Day that will conclude the unit.

What role does Transportation play in getting the products to market?

Discuss the role of the truck driver. Determine if this job provides goods or services. Chart all the ways goods are transported. Add magazine pictures to the chart and/or student work to illustrate modes of transportation. Use their flow charts for reference in determining at what point there is a need for transportation and whom the workers are that provide the service. If transportation was not depicted on the flow charts, ask each team to learn and then report on the distribution needs of their food and food product from the farm to the table.

How has technology changed the agriculture business?

Ask students how they think technology has influenced the agriculture business. Discuss specialized needs, such as refrigerated cars for bananas. Help students understand that various inventions have made it possible for such things as high-speed transportation and refrigeration. What other parts of the industry have been affected by inventions and different technology?

The Supermarket

Discuss the role of a supermarket or grocery store. Review samples of floor maps obtained from local supermarkets. With student input, make a chart of the major parts of a supermarket.

Explain that there are many different types of maps. Try to show examples such as a map of Disneyland or Magic Mountain, a zoo, a museum, or a park. Review the parts of a map - the title, date, and symbol key.

Create six new teams. Each team should have at least one person from each of the former "Farm Teams". This way each new team will have a "specialist" from each of the farms. Have each team work on the design for a supermarket and draw a map to show its floor plan. Each group could

develop such things as display cases for their food products, plus other necessary things for the maps.

Work together to design a rubric for what should be included in their map. Refer to the next page for suggested parts for each map. Each student's name may be listed next to the parts he/she does to help track of individual responsibility. If desired, have students make their maps 3-dimensional. A variety of materials can be used such as empty milk cartons. Pipe cleaners can be used to represent the workers in different areas. Encourage the students to be creative and inventive.

Example:
Suggested Parts of a Supermarket

- Food sections (Produce, Dairy, Frozen Foods, Bread, etc.)
- check out section
- Loading dock/delivery area
- Cold storage area/other storage areas
- Meat packaging/butcher area
- Bakery
- Pharmacy
- Manager's Office
- Grocery cart storage area
- Parking lot, including handicapped area
- Name of the supermarket
- Title, date, and symbol key for the map

If teams construct 3-D maps, have each student draw a bird's eye view of their 3-D map. The class could first do a whole group example together to help the students understand the assignment.

Focus Question: How did people get their food long ago?

Ox Cart Man

Introduce and read *Oxcart Man* by Donald Hall. This story is rich in both nouns and verbs. Include pictures or sample artifacts whenever possible to develop the content-rich vocabulary. Discuss the goods he had to sell, how he got each of the goods (grew it/made it), how he got them to market (the customer/consumer), and how the customers might have paid him. Compare his methods to today's methods for getting those same types of goods to the customer and how today's customers might pay for them. Help students to make the following Venn diagram.

Examples:

Modes of Transportation

Long Ago	Today
wagon	truck

Method of Payment

barter	money

Sarah Morton's Day

Explain that you are going to read a story about a girl who lived long ago. Encourage the students to think of how people got their food long ago. Introduce and read *Sarah Morton's Day* by Kate Waters. Review the story and pictures with the students. Discuss how people lived long ago. Compare and contrast it to how people live today. Make a class Venn Diagram comparing long ago and today.

Example:

How People Live Today	Same	How People Lived Long Ago
We wear jeans and shirts		They wore over-garments
We have electric or gas stoves.		They had wood-burning stoves.
People work outside the home		People worked at home.

With partners, students discuss what they think Sarah ate. (See Appendix 8) "Ask where did she get her food? Compare and contrast how Sarah got her food and how we get our food. Create an organizer and chart responses.

Example:

Sarah's Food	How She Got It
(Appendix 3) Carrots	She grew them.

Self-sufficient versus Depending Upon Others

Discuss the concept of being self-sufficient vs. depending on others. Use Sarah's family and the OxCart Man's family as an example of being self-sufficient. Ask student to explain why we probably are not self-sufficient and ways in which some families might still be self-sufficient.

Example:

Self-sufficient Families	Families Not Self-sufficient
They grow their food.	They buy their food.
They built a table.	They bought a table.

Compare and Contrast

As an assessment, have students write two or three sentences comparing food production long ago to food production today.

Processing or Preserving Food

Introduce and read, using the think aloud process or the "book talk" strategy, *Blueberries For Sal* by Robert McCloskey. Show the inside front cover two page picture spread. Discuss the pictures with the students. Especially discuss and explain what Sal and her mother are doing and why. Refer to the Sarah Morton story. Ask students to explain how they think Sarah's family probably processed food so they would be able to eat it later. Ask how their family processes food to eat later. Make a Venn diagram of the student responses.

Example:

Processing Food to Eat Later

Sal's Family	Sarah's Family
canning	drying

Our Family
freezing

Classroom Demonstration

Demonstrate different methods of processing and preserving food. Invite parent volunteers who responded to the parent letter, and Cafeteria Manager, and/or the District Food Manager to talk about this topic.

Classroom Museum

If possible, establish a Classroom Museum that has a variety of print and non-print resources, such as, memorabilia, antiques, artifacts, realia, and documents. Label objects or classify them in some way, such as an "Exhibit of Old Food Product Labels" or "Tools that Ranchers and Farmers Use." The museum is not the same as the Resource Center previously described. However, some items from the Resource Center could be used in the museum as well. Students, parents, community contacts, and the teacher can contribute to the museum. Museum guidelines need to be established, such as:

- Ask permission before touching museum objects.
- Use museum objects for research and learning about history.
- Visit the museum during the posted visiting hours.

C
Culminating the Topic

The major culminating activity for the unit is a Food Festival Day. However, before beginning the preparations for the Food Festival Day, have students complete several application activities to demonstrate their learning about the people who supply our food.

I Am Poem
Write an "I Am Poem" based on a job of your choice in the food chain – such as the farmer's job or a job in the food processing plant/factory (Appendix 9).

ABC Book (Optional Activity)
Make an ABC book based on the content of this lesson.

Complete the "What Did We Learn" section of the KWL chart for "What We Know About Farms".

Food Festival Day
The Food Festival Day will provide an opportunity for students to demonstrate through a variety of activities the content that they have learned. The festival can be conducted for the class or invitations can be extended to others, such as parents, another class, and outside guests. If outside guest are to be invited, a time line needs to be established so that invitations can be sent in advance of the activity. Students need to assume the responsibility of writing and sending invitations and preparing festival publicity.

Establish guidelines for the number of activities each team needs to complete. This will be based on how much time can be spent on this unit, space available to display the activities and exhibits, and available materials. Projects developed during the unit, such as the farm murals, the flow charts, and the supermarket/warehouse maps, should be displayed at the Food Festival.

For the Food Festival, have each farm team develop an exhibit and presentation. The preparation activities that each farm team engages may include:

- role playing people who play a direct or indirect part in their product
- preparing food processing tours using the flow charts
- preparing, growing and harvesting information
- sharing the history of the product/food
- writing job wanted ads

- designing product labels
- creating advertisement posters
- writing food commercials
- writing poems and/songs about their food
- giving a cooking demonstrations
- charting price lists
- sharing the health factors of the food
- creating new food products
- explaining technological influences on their product
- writing a revised Food Chain Story.
- drawing a diagram of a food and label the parts.
- choosing a food related job that they might like to be when they go up.
- studying photos, calendar pictures and/or art prints about the concepts of the topic depicting now and long ago. Each student chooses two pictures and through photoanalysis expresses his/her understanding in a mode of their choice

Assessment

Student assessment will be on-going throughout the unit. The focus questions provide a framework for the evaluation of the lesson. Students will demonstrate their understanding of the content of this lesson in the following ways:

Where does our food come from?

- use a map of the local community and a local Yellow Pages directory to identify the location of places we depend on for our food
- complete a "Researchers Notes" form for using the Yellow Pages and other types of reference materials
- complete a KWL chart on "What We Know About Farms"
- work as a group to construct a mural depicting one type of farm including a background with geographic features, typical buildings, equipment used, a farmer and farm workers, and crops and/or animals
- write a letter or use the telephone to locate information on the type of farm being researched and for the type of food being processed
- design a map for a supermarket
- make an ABC book based on the content of this lesson (optional)
- participate in the "Food Festival Day" planned by the class

How is food produced, processed into a variety of food products, distributed, and sold to the consumers?

- create a flowchart to trace the sequence of a crop or animal as it moves through a food processing plant/factory (Appendix 7c and 7d)
- write an "I Am Poem" (Appendix 9) based on a job of their choice in the food chain - such as the farmer's job or a job in the food processing plant/factory.

How did people get their food long ago?

- write two or three sentences comparing food production long ago to food production today.

Farm Mural Rubric

The farm mural includes:

- a background showing geographic features
- appropriate farm buildings
- types of farm equipment appropriate to the farm
- farmer and farmer workers doing their chores
- crops and/or animals

Flow Chart Rubric

The flow chart includes:

- evidence of contacting a food company by letter or phone
- illustration of the steps that the food (plant or animal) goes through including packaging and transporting
- workers who are involved with processing and transporting food
- a time line showing the process from farm to market
- a script for a guided tour of the processing plant including the key concepts such as: history of the food and processing plant; information about the owner; types of jobs performed at the processing plant; an explanation of what happens during the food processing; a list of the ingredients of the food products and where they come from; types of transportation used to get the products to and from the processing plant; an explanation of how much this food is consumed around the world

Supermarket Rubric

The supermarket includes:

- produce, dairy, frozen food, bread, canned goods, and other appropriate sections
- check-out area
- loading dock or delivery area
- cold storage area
- general storage areas
- meat and poultry display
- meat processing/packaging area
- bakery
- manager's office
- grocery cart area
- parking lot, including handicapped parking

Extended and Correlated Activities

Reading Related Books

While students are doing their research and waiting for responses to their letters, read aloud books which develop the key topics and concepts of the unit.

Examples:

Book	Key Concepts	Activity
The Year At Maple Hill Farm by Alice and Martin Provensen	seasons	Make word webs for each season
Cloudy With a Chance of Meatballs	weather	Chart weather words.
Amelia's Road by Linda J. Altman	farm workers	Make a story map.
Wheat -The Golden Harvest by Dorothy Hinshaw Patent	equipment, machines	List equipment and machines. Discuss how they affect jobs.

What's in the Box/Bag?" activity

Introduce the "What's in the Box/Bag?" activity. Put a canning tool or an old fashioned meat grinder or other type of artifact in a box or a bag. Show the box to the students. Explain that they are to try to guess what is in the box by asking questions that can be answered only by "yes" or "no." Make the following chart and write the responses (Appendix 12).

Example:

What's In The Box?

	Yes	No
Students asks: "Is it metal?"		
Teacher answers and records:	It is metal.	
Students asks: "Can you play with it?"		
Teacher answers and records:		You don't play with it.
Students asks: "What color is it?"		
Teacher says: "All questions need to have a 'yes' or 'no' answer. How could you ask a question about color so that you get a yes or no answer?"		
Students asks: "Does it have more than one color?		
Teacher answers and records:	It has more than one color.	

Continue the activity until the chart paper is filled. Review all the information through Echo Reading. Have students guess what it is. List the guesses on the board. If the students do not guess the correct answer, show them the item and explain what it is. Indicate that it is a tool used to process food.

Bring several items for this activity. Use students as the recorder and leader. Encourage the students to also bring items for this activity. (Include this activity whenever possible since it is a good problem solving and critical thinking activity. It also helps develop skills that are good for artifact analysis, another highly recommended activity.)

Favorite Food

Explain that you have a new book about a mouse who has a favorite food. Show the book to students and have them predict what the mouse's favorite food is and what the story might be about. Read *The Little Mouse, The Red Ripe Strawberry, and The Big Hungry Bear* by Don and Audrey Wood. Stop throughout the story to continually let students predict what the mouse will do next to keep the bear from getting his favorite food. After completing the story, review it with students. Determine if the strawberry was the mouse's favorite food and what he was willing to do to not let the bear get what he wanted. Discuss what the bear's favorite food might be, how bears get food, and why the mouse didn't want the bear to get the strawberry. Ask students if they ever did anything to keep someone else from eating their favorite food or what they did to try to get their favorite food.

Goods and Services

Define goods and services and add it to the Word Wall, Have students identify items on the chart as either goods or services. Ask for more examples. Use the book *Alexander and the Terrible, Horrible, No Good, Very Bad Day* by Judith Viorst to engage students in an activity about goods and services. Introduce the book by explaining that this is a story about a day in the life of a boy about your age that lives in the present. Direct the students to listen for all the ways the boy, his family and friends use goods and services. If several copies of the book are available, have students work with partners, reread the story, and identify the goods and services. Then chart the student responses or make a word web (cluster).

Example:

Goods	Services
gum	Mrs. Gibson driving children to school
skateboard	Mrs. Dickens teaching the students
sweater	Paul's mother fixing his lunch
car kit	Dr. Field's finding a cavity
cereal	Mother driving car
code ring	
cupcakes	There are also inferred services:
Hershey bar	Alexander's Mother fixing his lunch

Class or School Garden - Students plant and/or prepare a variety of foods using various garden tools and kitchen and cooking utensils from the present and the past such as pumpkins, potatoes, peanuts, and/or lima beans, and prepare butter, bread, applesauce, and/or pickles.

Stores – Now and Long Ago - Students create a store of long ago and today and have students "purchase" items through trading, bartering, and using money as forms of exchange. What difficulties did you have in bartering? Why is money a good form of exchange?

Food Chain - To identify people who help provide our food and to demonstrate the interdependence of consumers, food producers, food processors, and food distributors, each student makes a paper chain which starts with his/her name. Each link on the chain should be labeled with a job title that represents a person the student is dependent on for a particular food.

Food Warehouse Map
When students design a map of a supermarket, have half of the students design a map for a warehouse. Suggested parts of a warehouse map include:

- Cold storage area
- Warm storage area
- Other storage area
- Loading/delivery docks
- Manager's Office
- Parking lot

Creative Dramatics - Students use puppets, paper dolls, and costumes to role play people who made a difference in the food industry in a very unusual or special way.

Food Labels and Packaging - Investigate package labeling by examining three or four products. Conduct a survey of parents and friends to determine if shoppers read labels on packages. Chart responses. What do the labels tell us? Is it important to know what is contained in the product? Why? Students write letters to their congressmen or to the President to express concern/interest about the information, or lack of it, on food labels. Include suggestions for improving or changing the regulations for food labels.

Economic Choices - Students pretend they are the owner of a food processing plant/factory and decide what food product(s) to make for the next 12 months after they learn that a flood has destroyed over half of a key food crop they need at the food processing plant.

Current Events Related to the Unit - If possible, video a section of the nightly news to show weather related problems such as floods, droughts, or windstorms. Have students identify weather and natural disasters that create problems for farmers. Construct a chart showing weather needs for various food crops and animals.

Resources for the Sample Topic
Books with an ** are strongly recommended and with * are highly recommended for use with this unit. Refer to the extended bibliography that is available upon request.

* Cook, Janet and Bond, Shirley. *Where Food Comes From.* England: Usborne Publishing, Ltd., 1989. ISBN 0-7460-0280-7 (paperback.) This book describes all the things that happen to food before it reaches your table. It shows how and where food is grown, how it is canned, frozen or dried, and how it is packaged for sale in stores. You can find our how the fizz gets into lemonade, how a crisp starts life, what turns milk into yogurt, and much more. Part of a series for young readers, the book provides information about familiar, everyday things in clear, simple text and bright, detailed illustrations. It helps students understand how food from the farm is processed into the food products we find at the market. More than one copy is highly recommended because students will use it for on-going research.

*Egan, Robert. *From Wheat to Pasta.* New York: Children's Press, 1997. ISBN 0-516-26069-3 (paperback.) A part of the Changes series, this photo essay book details in words and photographs the steps in making various kinds of pasta from growing and harvesting the wheat through the grinding of the flour to making the dough and shaping the final product.

*Gershator, David and Phyllis. *Bread is for Eating.* Illustrated by Emma Shaw-Smith. New York: Henry Holt and Company, 1995. ISBN 0-8050-3173-1 (hardback) 0-8050-5798-6 (paperback). Mamita explains how bread is created in a rhythmic song sung in both English and Spanish. Rich, vibrant paintings, reminiscent of Guatemalan folk art, depict a variety of peoples and breads. Colorful symbolic borders surround most of the pages. The stages of making bread include the planing and sprouting of the seed, the farmer, harvester, miller, storekeeper, baker to the consumer.

** Gibbons, Gail. *Farming.* New York: Holiday House, 1988. ISBN 0-8234-0797-7 (paperback.) This book is an introduction to farming and the work done on a farm throughout the four seasons. The text and illustrations are simple and appealing for primary age students. It defines and illustrates six kinds of farms at the end of the book. These are the six farms that are used to determine the six teams of students in their farm mural project. This book is highly recommended for students to use as a resource book for learning about farms. Multiple copies, one for each team, would be useful.

*Gibbons, Gail. *The Milk Makers.* New York: Aladdin Paperbacks (Simon & Schuster), 1987. ISBN 0-689-71116-6 (paperback.) This interesting, informative book provides details on the stages of milk production from how the cows produce the milk to how it is processed before being delivered to stores. The book is recommended for the flow chart activity.

**Hall, Donald. *Ox-Cart Man.* New York: Viking Penguin, Inc., 1979. ISBN 0-590-42242-1 (paperback). The story of a family who produces food and other hand made products on their

farm long ago and then sells and buys in a town some distance from where they live. It is a good book to use to help students compare and contrast family and farm life from the past to the present. The book also illustrates many of the economic concepts that are addressed in Standard 1 of the History Social Science Framework.

*L'Hommredieu, Arthur John. *From Plant to Blue Jeans*. New York: Children's Press, 1997. Part of the Changes series, this photo essay describes the process of making blue jeans from the harvesting of cotton through the weaving of cloth and sewing of the final product.

** McCloskey, Robert. *Blueberries For Sal*. New York: Viking Press, 1948. ISBN 0-14-050.169 X (paperback.) In fresh and captivating pictures the author-artist tells what happens on a summer day in Maine when a little girl and a bear cub, wandering away from their blueberry-picking mothers, each mistake the other's mother for its own. The Maine hillside and meadows are real and lively, the quiet humor is entirely childlike, and there is just exactly the right amount of suspense for small children. A two-page picture sped shows an early kitchen from about the 1920's with the girl and her mother canning blueberries. This is a good reference for helping students develop the concept of food processing over time, as well as, other kitchen related changes. This author has written several classic pieces of literature for children.

** ***1999 Teacher Resource Guide***. Sacramento, CA: Foundation For Agriculture In The Classroom, Post Office Box 15949, Sacramento, CA 95852-0949. Phone: (916) 561-5625 or (800) 700-AITC Fax: (916) 561-5697. E-Mail: cfaitc@cfbf.com Web Site: www.cfaitc.org This is a guide of educational materials about agriculture. It is provided free to California public and private school teachers. It has a wealth of information about programs sponsored by the California Foundation for Agriculture in the Classroom, resources available throughout the United States, background information, lesson plans you can order, plus complete sample lessons. This resource is a valuable tool for the teacher and the students. There are local representatives throughout California and you will often find them at a booth at History Social Science conferences.

Phipps, Barbara. *Economics America: Master Curriculum Guide in Economics Teaching Strategies K-2*. New York: National Council on Economic Education, 1993. ISBN 1-56183-470-X. This is a teacher resource manual. It demonstrates effective ways to teach economic concepts and within different subject areas. It provides excellent background information on economics for the teacher. Many effective lessons and activities are outlined step by step for the teacher with listed materials needed to complete the activities. An extensive list of recommended literature books is provided. This resource manual with the accompanying black-line student activities is a very complete economics program for students.

*Robson, Pam. *What's for Lunch? Corn*. New York: Children's Press, 1997. ISBN 0-516-20823-3 (library binding) 0-516-26219 X (paperback.) The book provides an introduction to the corn we eat, starting at the farm with its planting and harvesting, until it is sold in the markets. Also discussed is the manufacture of other products made from corn.

Viorst, Judith. *Alexander and the Terrible, Horrible, No Good, Very Bad Day*. New York: Scholastic, 1972. ISBN 0-590-42144-1 (paperback.) Alexander goes through a typical day and experiences many unfortunate incidents. Students enjoy reading about Alexander and can usually relate their own lives to his quite easily. This story also helps by providing many examples of goods and services. *Alexander Who Use To Be Rich Last Sunday* (Macmillan, 1978), by the same author, is also recommended for use with this lesson.

** Waters, Kate. *Sarah Morton's Day: A Day in the Life of a Pilgrim Girl.* New York: Scholastic, 1989. ISBN 0-590-42635-4 (paperback.) This book follows one day of a pilgrim girl, Sarah Morton, on November 12, 1627 as she goes about her day. Full-color photographs taken at Plimoth Plantation, a living history museum in Plymouth, Massachusetts will transport you back to the time of the Pilgrims. This book, Marcia Sewall's *The Pilgrims of Plimoth* (Atheneum.1986, ISBN 0-689-31250-4, hardcover) and Kate Water's *Samuel Eaton's Day: A Day in the Life of a Pilgrim Boy* about a day during the summer rye harvest in 1627 are excellent for sharing and comparing life long ago to farming life today. They contain additional useful historical background information. Teachers can call Plimoth Plantation (1-508-7461622) for limited research help.

Wood, Don and Audrey. *The Little Mouse, The Red Ripe Strawberry,* and *The Big Hungry Bear*. Singapore: Child's Play, Ltd., 1995. ISBN 0-85953-012-4 (paperback.) A delightful story with charming illustrations about a mouse that is very creative in trying to hide the first strawberry of the season from a bear. The mouse loves strawberries and finally thinks of a way to share the delicious strawberry on his terms instead of the bear's. This story will help illustrate the concept of how we have favorite foods and what we will do to make sure we can enjoy them. Teachers can use this book to help motivate discussions about food, especially favorite foods.

Appendix 1

Parent Letter

Dear Parents:

Our class will begin a new History/Social Science Unit called **The People Who Supply Our Needs**. The students will learn about the people who produce, process, and distribute our food.

We will work on several projects over the next few weeks. If you think you have any information that you would like to send to the class to use in the Resource Center or the Class Museum we would appreciate it. Items that we need include:

- telephone yellow pages
- magazines or pictures that depict farming or food production now and long ago
- empty food containers with their labels still on them
- food preserving equipment (such as canning realia)
- artifacts related to food production (such as a butter churn)

A special event at the end of the unit will be called "A Food Festival Day." We hope you will be able to attend. This will give you a chance to learn about the activities we will have done and the things we have learned. Some of the activities during the unit involve the family as a resource for information and as a resource for sharing in the classroom. Some of the ways that you or anyone you recommend can be involved in the classroom:

- Talk about your job if it is in any way related to farming, the food industry, transportation, nutrition, supermarkets
- Talk about what it was like to live on a farm in the past
- Talk about what it is like to grow your own food today
- Show how we preserve food today or in the past
- Do a cooking demonstration
- be a volunteer to help the students as they do their research and complete their team projects

Please respond to the form on the next page and return it to your child's teacher. Thanks for your support and help.

Sincerely,

The Teacher and Students in Room _____

People Who Supply Our Food

Directions: Return to your child's teacher by_____.

Child's Name _____Grade 2, Room _____.

Parent's Name:

_____

Telephone Number_____ The best time to reach me is:_____

I can send the following resource materials:

_____

_____

I can help in the following ways:

_____

_____

I recommend the following person(s) to help:

_____

Additional Comments:

_____

_____

_____

Appendix 2

A Suggested List of Vocabulary Words

Following is a list of some of these words could be used on the Word Wall, in word banks, and in student made ABC books. Each team will also have words that apply to their topic only.

A airplane, apple
B bread, barter
C consumer, calf, cow, compass rose, chart, crops, city, cold, container, cattle, canning, chicken, competition
D depend, dependence, diagram, driver, dry, dairy
E east, equipment, economics, exchange
F factory, farm, food, farmer, fall, feed, fruit, fresh, favorite, freeze, field, family
G grain, grow, graph, grocery, goods
H harvest, history, hot
I invention, interdependence, independent, income
J job
K key
L land, load, leaf, leaves, labor
M map, machine. milk, meat, market, money
N north, natural, needs
O observe, observation
P picker, packer, pick, plant, preserve, pest, poultry, producer, people
Q quilt
R ranch, ripe, rain, route, root, resources, research, researcher
S summer, supermarket, storekeeper, sell, spoil, soil, seaport, south, spring, symbol, stem, store, state, seed, ship, services, scarcity, supply, self-sufficient
T tradition, truck, train, tools, travel, tractor
U uniform
V vegetables
W weather, winter, west, work, workers, warehouse, wheat, water
X
Y
Z

Source: Janice Harbin, Little Lake City School District

Appendix 3

Researcher's Name _____

RESEARCHER'S NOTES

DIRECTIONS:

Look, study, and observe.
Write and draw what you observed.
Write questions you have about what you observed.

Name what you are observing

_____

Notes:

Appendix 4

KWL Chart

Name _____

What I Know, What I Want to Know, What I Learned

K	W	L
what I Know	what I Want to know	what I Learned

Appendix 5a

California's Top 20 Farm Products

(Dollars in Millions)

Rank	Commodity	1997
1	Milk and cream	$3,626
2	Grapes	$2,819
3	Nursery products	$1,758
4	Cattle and calves	$1,323
5	Lettuce	$1,251
6	Almonds	$1,127
7	Hay	$1,037
8	Cotton Lint	$984
9	Tomatoes	$870
10	Flowers & Foliage	$729
11	Strawberries	$686
12	Oranges	$587
13	Chickens	$473
14	Broccoli	$449
15	Walnuts	$352
16	Rice	$347
17	Carrots	$345
18	Eggs, chicken	$345
19	Lemons	$266
20	Garlic	$262

Appendix 5b

Kinds of Farming

Most farms are specialized.
They produce one or two main crops or kinds of farm animals

Dairy Farms raise dairy cows for their milk. The milk is sold to dairies where it is processed and packaged.
Egg and Poultry Farms - Egg farms raise chickens to lay eggs. Poultry farms raise chickens for their meat.
Grain Farms grow grain for making bread and cereals and other foods. Some grains are grown for animals, too.
Fruit Farms grow apples, peaches, oranges, and other fruits for people to eat.
Vegetable Farms grow beans, lettuce, carrots and other vegetables. They are sent to market and stores to be sold.
Cattle Farms and Ranches - beef cattle, pigs and other animals are raised for their meat.
Other

Appendix 5c

California's Top 20 Farm Product Word Cards

Milk and cream
Grapes
Nursery products
Cattle and calves
Lettuce
Almonds
Hay
Cotton lint
Tomatoes

Flowers & Foliage
Strawberries
Oranges
Chickens
Broccoli
Walnuts
Rice
Carrots
Eggs, chicken
Lemons

Garlic

Appendix 6
A List of Farming Topics/Concepts
For Teacher Information

-types of farms
-farm related vocabulary
-size and its implications
-farm buildings and their purpose
-map of farm showing various features, such as geography, field use, buildings, water supply
-water source, how much is used, how it gets to the plants and animals
-food sources
-animals on farms as pets and workers
-typical family chores
-farm workers and their jobs, including their family life
-equipment used
-tools used
-season affects
-use of technology
-farming over time
-interesting facts/feature
-people who have played a significant role in the agriculture industry
-planting, growing, and harvesting cycle
-soil preparation
-planting needs
-growing needs
-harvesting needs
-jobs that come in contact with farming
-animal care and feeding
-weed and pest control
-climate needs and concerns
-history of plant or animal, origin of use, origin of location
-how food is preserved for family use on the farm
-how food is packaged for transporting
-how food is going to be sold
-how food is transported when it leaves the farm
-destination of food
-affects of weather through the seasons
-typical day on the farm today and long ago
-natural disasters
-productivity per acre, bushel, etc.
-price when the farmer sells the food product
-costs for planting, growing, and harvesting food
-seasonal changes and their affects on the farm
-local, regional, and state agriculture industry

Janice Harbin, 1997

Appendix 7a
Flow Charts and Worksheets

From Peanuts to Peanut Butter Flow Chart

DIRECTIONS: Read the words in each box. Draw a picture to show what the words mean. This will make a flow chart to show how we get peanut butter from peanuts. Cut out the six boxes. Put your name on the back of each box. Scramble the boxes. Then put the boxes in order to make a flow chart about peanut butter.

Plant peanuts in sandy soil.	Take care of peanuts to make them grow.
Harvest the peanuts.	Clean and shell the peanuts.
Roast and grind the peanuts.	Ship the peanut butter to market.

Appendix 7b

How Bananas Get To You Flow Chart

DIRECTIONS: Read the words in each box. Draw a picture to show what the words mean. Write how many days each part takes to make a timeline with the flowchart. Cut out the six boxes. Put your name on the back of each box. Scramble the boxes. Put the boxes in order to make a flowchart showing how bananas get to the market.

Harvest the bananas in ___ day.	Ship from packing plant to seaport in ___ days.
Ship from seaport to seaport in ___ days.	Ship from seaport to warehouse in ___days.
Ripen bananas in warehouse in ___ days.	Ship to store in ___ day.

Appendix 7C

Crop Flow Chart

DIRECTIONS: Choose a fruit or vegetable. Read the words in each box. Draw a picture in each box to show what the words mean. Make a flowchart about the crop you chose. Extra credit: Add a timeline to the flow chart. Cut out the six boxes. Put your name on the back of each box. Scramble the boxes. Then put the boxes in order to make a flowchart about the fruit or vegetable you chose. My flow chart will be about _____.

Plant the crop.	Help the crop grow.
Harvest the crop.	Process the crop into a food product.
Package the food product.	Send the food product to market.

Appendix 7D

Animal Flow Chart

DIRECTIONS: Choose a farm animal. Read the words in each box. Draw a picture to show what the words mean. Make a flow chart about the farm animal you chose. Extra credit: Add a timeline to the flow chart. Cut out the six boxes. Put your name on the back of each box. Scramble the boxes. Then put the boxes in order to make a flow chart about the animal you chose. My flow chart will be about _____.

The farm animal is born.	Help the farm animal grow.
Send animal to meat packing plant.	Process the meat into a food product.
Package the food product.	Put the food product in the market.

Appendix 8
Information About Sarah Morton

An excellent book to use as a resource to learn more about Sarah Morton and the way the Pilgrims lived in the 1600s is *The Pilgrims of Plimoth* by Marcia Sewall. The following information about food that Sarah Morton probably ate is based on that book and the Sarah Morton book.

corn
cornmeal
barley
wheat
rye
peas
beans
carrots
turnips
artichokes
spinage (spinach)
onions
cucumber pickles
bread
pottage (thick stew)
hasty pudding (oatmeal or cornmeal cereal)
chickens
hens
eggs
milk
butter
cows
goats
swine
crabapples
pomions (pumpkins)
sallats (salad)
vergi (vinegar)
herbs
wild food:
fowl
hare
deer
nuts
berries
fish, lobster, eel

Source: Plimoth Plantation, Plymouth, Massachusetts

Appendix 9

I Am Poem

I am

I wonder

I hear

I see

I want

I am

I pretend

I feel

I touch

I worry

I cry

I am

I understand

I say

I dream

I try

I hope

I am

Appendix 10

List of Special Resources

The following addresses are recommended resources for the teacher to help prepare for the lesson and to gather useful materials for the classroom Resource Center:

U.S. Apple Association
Post Office Box 1137
McLean, VA 22101
(703) 442-8850
Free material

California Beef Council
551 Foster City Blvd., Suite A
Foster City, CA 94404-1673
(415) 571-7100 Fax: (415) 571-1831
Free material (request needs to be on school stationary)

California Milk Advisory Board
Communications Services
Post Office Box 4680
Modesto,CA 95352
(209) 521-1060
Free material

Dairy Council of California
1101 West National Drive, Suite B
Sacramento, CA 95834
(916) 263-3560 Fax: (916) 26-3566
Free material for 2nd Grade Teachers

National Peanut Council Educational Service
Post Office Box 845
Nashville, NC 27856-08
(919) 459-9977
Free material, indicate grade level when ordering

California Wheat Commission
Post Office Box 2267
Woodland, CA 95776
(916) 661-1292
Free material

U.S. Department of Agriculture
Agriculture in the Classroom
14th & Independence SW
Room 4307 South
Washington, D.C. 20250
(202) 720-7925 Fax: (202) 690-0062
Many free materials

Reminisce Magazine
Reminisce Customer Service
P.O. Box 991
Greendale, WI 53129
(800) 344-6913
This is a magazine that has excellent photos, pictures, personal stories, and numerous examples of how it was at the turn of the century and up to about the first half of the 1900s. It is a great resource for all the topics in this lesson, plus almost any other social studies concept. Call for a free copy.

Food Reproducible Thematic Unit
Teacher Created Materials, Inc.
P.O. Box 1214
Huntington Beach, CA 92647
ISBN 1-55734-278-4
There is also an Apple Reproducible Thematic Unit (ISBN 1-55734-266-0) and a Whole Language Units for Social Studies - Pre K-I (ISBN 1-55734-203-2) with sections on: families and their jobs, food, clothing, and shelter. They all have good ideas and activities.

From Farm To Table Reproducible Thematic Unit
Evan-Moor Corp.
18 Lower Ragsdale Drive
Monterey, CA 93940-5746
ISBN 1-55799-565-6
Another good resource for ideas and activities.

The Changing Countryside - Volume 1 (ISBN 0-689-50085-8) and The Changing City - Volume 2 (ISBN 0-689-50084-X) by Jorg Muller
Atheneum, New York
These are two different sets which contain several large pictures that depict change over time in the same area. A good resource for studying man's interaction with the environment.

The Farm - Early Years Thematic Notes (Cat. No. FS-44016)
Frank Schaffer Publications, Inc.
2370 Hawthorne Blvd.
Torrance, CA 90505

"Going Bananas" Math and Science Lesson
AIMS Education Foundation
There are many lessons in the AIMS materials that could be used to support the social studies concepts. Lessons often come with useful background information about the topic. Students usually enjoy these lessons and it is a good way to integrate the subject

Appendix 11

Background Information On Economics

Economic **wants** are desires that can be satisfied by consuming a good or a service. **Goods** are objects such as food, shoes, cars, houses that can satisfy people's wants. **Services** are activities such as medical care, haircuts, vacations, and education that satisfy people's wants. Economic wants are unlimited, and people cannot have everything they want. There are many different goods and services people can consume to satisfy their economic wants. People whose wants are satisfied by using goods and services are **consumers.**

Productive resources consist of what is required to produce the goods and services that people want. They fall into three categories.

Human resources, also called labor, are efforts of people directed toward producing goods and services. The quality of human resources is related to their health, strength, motivation, and education.

Natural resources are "gifts of nature," present without human intervention. Examples of natural resources include land, timber, fish, oil, mineral deposits, and climatic conditions.

Capital resources are goods made by people and used to produce other goods and services. They include buildings, equipment, machinery, ports, roads, dams, and other manufactured things needed to produce other goods and to supply services.

Producers combine human, natural, and capital resources to produce goods and services. When capital resources are combined with human and natural resources to produce goods and services, more and better quality products are usually the result.

Scarcity is the condition of not being able to have all the goods and services wanted. It results from the imbalance between unlimited economic wants and relatively limited resources available to satisfy those wants. Scarcity requires people to make choices about using goods and services to satisfy wants. Individuals and societies must continuously make choices about how to use the scarce resources available to then.

Opportunity cost is the next best alternative that must be foregone when an option is chosen. When limited resources are used for one purpose, opportunities to use these resources for other purposes are given up. The term "opportunity cost" refers to the most desirable of the alternative uses not chosen. Whenever people make personal or social decisions to use limited resources, opportunity costs are incurred.

When individuals satisfy their economic wants without the help of others, they are **self-sufficient (independent)**. When they depend on other people to provide for some of their economic wants and others depend upon them for some of their wants, they are **interdependent.** People are interdependent

because of economic specializations. Economic specialization occurs when people produce a narrower range of goods and services than they consume.

People normally specialize in producing those goods and services they are best suited or trained to produce. One of the results of specialization is reduced self-sufficiency (independence) and increased interdependence. Interdependence means that decisions of one economic unit (such as a person, business, community, or country) affect the choices of other economic units. Specialization is the basis for trade and exchange among individuals, businesses, cities, regions, and countries.

When people specialize and become interdependent in satisfying their economic wants, a need is created for trade or **exchange** of goods and services. The principle of voluntary exchange is based on the assumption that both sides expect to gain from trade. If they did not, they would not trade. The simplest form of exchange is **barter**, or the direct trading of goods and services between people. Since barter is usually inconvenient, a medium of exchange (**money**) developed to facilitate exchange.

People who work to produce goods and services earn **income**, usually in the form of money, for their efforts. People spend their income to buy goods and services that they want to consume, or they save it for future use. Prices are the amounts of money that people pay in exchange for units of particular goods or services.

A market exists whenever buyers and sellers exchange goods and services. A market does not need to have a single physical location. A market exists as long as there are arrangements that enable people to buy and sell.

Source: Teaching Strategies K-2, Economics America

Appendix 12

WHAT'S IN THE BOX?

Yes	No

Janice Harbin, 1997

Appendix 14

Art Projects
Fruit and Vegetable Art Prints

Materials Needed:

fruit and vegetables, such as, apple, orange, onion, celery, potato, artichoke, green pepper; knife; paper plates or plastic foam trays; tempera paint; paper, such as, construction paper, chart paper; paper towels; paint brushes; water

- Make printing stamps by cutting the fruits and vegetables in halve or into other shapes and sizes.
- Put paint in a paper plate or plastic foam tray. Use a different plate for each color. Paper towels can be put at the bottom of the plate or tray before the paint is put in the plate to help make a "stamp pad". Let the paint soak into the towels.
- Press/dip the cut side of the fruit and vegetables into the paint. Or use a paint brush to paint the cut side of the fruit and vegetables. Don't put too much paint on the fruit and vegetables. You may need to make a print on an extra piece of paper to get rid of some of the paint first.
- Press the "inked" fruit and vegetables onto the paper to get a copy or impression. Lift off the fruit or vegetable. Be careful to not jiggle or smear the fruit or vegetable print. You can get two or three prints before you need more paint. Let the prints dry.

Triaramas

Materials Needed:

construction paper; small pieces of paper, such as, construction paper scrapes, tissue paper scrapes; scissors; glue; pencils; crayons, markers

1. Cut the construction paper to make a square, such as a 12" square.
2. Fold the top right corner of the square down to the lower left corner. Repeat this step with the other opposite corners.
3. Open the square and cut one fold line to the center of the square.
4. Position the square as if it is a diamond. Draw a background scene on the top half of the square (diamond).
5. Overlap the two bottom triangles and glue. Add stand-up parts to complete the triarama.

Janice Harbin, 1997